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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Timothy N. Trop
Trop, Pruner & Hu, PC
8554 Katy Freeway
Suite 100
Houston, TX 77024

EXAMINER

VU, NGOC K

ART UNIT

PAPER NUMBER

2611

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60

Please find below and/or attached an Office communication concerning this application or proceeding.

[Handwritten signature]

Office Action Summary

Application No.

09/138,054

Applicant(s)

RAMANATHAN, RAMANATHAN

Examiner

Ngoc K. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-23 and 25-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-23 and 25-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's arguments with respect to claims 1-17, 19-23 and 25-38 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 recites the limitation "the at least one *characteristic of the transmitter module*" in lines 8-9. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-13 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (US 6,044,396) in view of Ueno (US 6,185,736).

Regarding claim 1, Adams discloses a transmission system, comprising: a data management module (1002, 708, 208, 206, 204, and 202) capable of managing data flow (controlling rate of encoder 702 and processor 706); and a transmitter module (210) couple to a transport medium and to the data management module. Adams further discloses that the rate of a secondary information stream depends upon the rates of the encoded information streams, and a channel rate control circuit 708 controls the processing rate of the encoder 202 and the encoder transmit processor 706 (see FIG. 1, 2, 4, 7, 10; col. 2, lines 46-48; col. 3, lines 65-67;

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col. 5, lines 47-50 and 57-61). Adams does not specifically the limitation of the transmitter module contains configuration information specifying at least one predefined transmission characteristic and access the configuration information to determined the predefined transmission characteristic and modify the data flow management based on transmission characteristic. However, Ueno discloses that storing data having a traffic characteristic at the server 11, and a network 14 executes the bandwidth resource allocation based on the characteristic of the transmission rate change designated by the notified parameter to control the transmission included adjusting the traffic management and the running of the network (see col. 11, lines 7-20). Therefore, it would have been obvious to one of ordinary skill in the art to modify Adams by providing configuration information specifying at least one predefined transmission characteristic and access the configuration information to determined the predefined transmission characteristic and modify the data flow management based on transmission characteristic in order to efficiently perform a traffic management and a network management.

Regarding claims 2 and 3, Adams discloses an additional transmitter module with a different transport medium (the service source has a cable feedline 212) (see col. 4, lines 6-9).

Regarding claims 4 and 7, Adams discloses that the transmission characteristic of the transmitter module varies over time, wherein the transmission characteristic includes a data flow rate of the transmitter module (the bit rate of the encoder 700 is allowed to vary) (see col. 6, lines 44-50).

Regarding claim 5, Adams discloses the system further comprising an interface (selector 404) (see FIG. 4, and col. 4, lines 52-54).

Regarding claim 6, Adams discloses the system comprising an interface (selector 404) (see FIG. 4, and col. 4, lines 52-54), but does not specifically disclose interface including API

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interface. Official Notice is taken that utilizing API interface for compatible communication between the different protocols in data communication system is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify Adams by including API as interface for compatible communication between the different protocols.

Regarding claim 8, Adams discloses the data flow rate is adjusted to compensate for delays in the transmitter module (decrease the rate at which the transmit processor 706 reads data from the encoder buffer 704) (see col. 5, lines 61-65).

Regarding claim 9, Adams discloses the limitation of the data management module that reads on the channel rate control circuit 708 governs rates of the encoder 702 and the encoder transmit processor 706 based upon a comparison of buffer 704 with a buffer fullness threshold T (see col. 5, lines 57-60).

Regarding claims 10 and 11, Adams discloses that the data management module combines digital data (digital program) with television data (cable programming) to transmit over the transport medium, and wherein the transport medium includes cable transmission (see col. 2-3, lines 40-11).

Regarding claims 12 and 13, Adams discloses the limitations of transmitter's transmission characteristic and the data management module that read on the channel rate control circuit 708 monitors the fullness of the encoder buffer 704, and in response, controls the processing rate of the encoder 202 and the encoder transmit processor 706 (see col. 5, lines 47-50).

Regarding claim 31, Ueno modified Adams further discloses that the notification parameter information quantity can be further reduced by compression-encoding (see col. 9-10, lines 67-3).

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Regarding claim 32, Ueno modified Adams further discloses the video server 11 prepares a transmission schedule of a variable rate in a form of a file as time series of a transmission rate change. The network 14 executes the bandwidth resource allocation based on the characteristic of the transmission rate change designated by the notified parameter (see col. 6, lines 63-66, col. 11, lines 14-17).

6. Claims 14-17, 19-23, and 25-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ginzburg et al. (US 6,078,919) in view of Ueno (US 6,185,736).

Regarding claim 14, Ginzburg discloses a transmission system, comprising: a data management program capable of assembling data (client 14 sends the data request to server software system 18 of server 17); a transmitter (server 17) capable of receiving data from the data management program and transmitting the data to a transport medium (processes the request and delivers the requested data to client 14); and a communication interface (network 16) between the data management program and the transmitter that enables the data management program and transmitter to negotiate the type of communication to be performed (including global computer networks such as Internet, local computer such as Ethernet/telephone/cable/DBS networks or any other transmission medium suitable for supporting client-server communication) (see col. 2, lines 61-65; col. 3, lines 43-50). Ginzburg fails to disclose the feature of the transmitter contains configuration information specifying a characteristic of the transmitter and accessing the configuration information of the transmitter and to modify management of data flow based on the configuration information. However, Ueno discloses that storing data having a traffic characteristic at the server 11, and a network 14 executes the bandwidth resource allocation based on the characteristic of the transmission rate change designated by the notified parameter to control the transmission included adjusting the traffic management and the running of the network (see col. 11, lines 7-20). Therefore, it would

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Regarding claim 32, Ueno modified Adams further discloses the video server 11 prepares a transmission schedule of a variable rate in a form of a file as time series of a transmission rate change. The network 14 executes the bandwidth resource allocation based on the characteristic of the transmission rate change designated by the notified parameter (see col. 6, lines 63-66, col. 11, lines 14-17).

6. Claims 14-17, 19-23, and 25-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ginzburg et al. (US 6,078,919) in view of Ueno (US 6,185,736).

Regarding claim 14, Ginzburg discloses a transmission system, comprising: a data management program capable of assembling data (client 14 sends the data request to server software system 18 of server 17); a transmitter (server 17) capable of receiving data from the data management program and transmitting the data to a transport medium (processes the request and delivers the requested data to client 14); and a communication interface (network 16) between the data management program and the transmitter that enables the data management program and transmitter to negotiate the type of communication to be performed (including global computer networks such as Internet, local computer such as Ethernet/telephone/cable/DBS networks or any other transmission medium suitable for supporting client-server communication) (see col. 2, lines 61-65; col. 3, lines 43-50). However, Ueno discloses that storing data having a traffic characteristic at the server 11, and a network 14 executes the bandwidth resource allocation based on the characteristic of the transmission rate change designated by the notified parameter to control the transmission included adjusting the traffic management and the running of the network (see col. 11, lines 7-20). Therefore, it would have been obvious to one of ordinary skill in the art to modify Ginzburg by providing configuration information specifying at least one predefined transmission characteristic and access the configuration information to determined the predefined transmission characteristic

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and modify the data flow management based on transmission characteristic in order to efficient perform a traffic management and a network management.

Regarding claim 15, Ginzburg discloses delivering Internet and television information (see col. 2, lines 43-50).

Regarding claim 16, Ginzburg discloses delivering information to a user over the Internet with hypertext transport protocol and transmission control protocol, delivering audio-video programming to user over cable system (see col. 2, lines 43-50).

Regarding claim 17, Ginzburg discloses that transport media have different transmission characteristics (delivering information to a user over the Internet with hypertext transport protocol and transmission control protocol, delivering audio-video programming to user over cable system) (see col. 2, lines 43-50).

Regarding claim 19, Ginzburg discloses that the network client 14 and server 17 exchange information over network 16 (see col. 3, lines 43-50).

Regarding claim 20, Ginzburg discloses delivering the requested data at the desired bit rate (see col. 3, lines 54-59).

Regarding claim 21, Ginzburg discloses a computer-readable medium storing a program (software) executable by a computer (client 14 is configured to execute computer software instructions involved in performing the network parameter calculations) in a transmission system including a transmitter (server 17) coupled to a transport medium, the program comprising instructions for causing the computer to identify at least one transmission characteristic (identify network parameter such as transfer bit rate) of the transport medium over which data to be transmitted by a transmitter module (server 17); and modify data flow management based on the identified at least one transmission characteristic (network 16 can accommodate the requested data transfer bit rate) (see col. 5, lines 10-17, 26-29; col. 3, lines 43-50). Ginzburg does not

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specifically disclose retrieving or executing stored information to identifying at least one transmission characteristic of transmitter. However, Ueno discloses that storing data having a traffic characteristic at the server 11, and a network 14 executes the bandwidth resource allocation based on the characteristic of the transmission rate change designated by the notified parameter to control the transmission included adjusting the traffic management and the running of the network (see col. 11, lines 7-20). Therefore, it would have been obvious to one of ordinary skill in the art to modify Ginzburg by providing configuration information specifying at least one predefined transmission characteristic and access the configuration information to determined the predefined transmission characteristic and modify the data flow management based on transmission characteristic in order to efficiently perform a traffic management and a network management.

Regarding claim 22, Ginzburg discloses performing a network parameter determination prior to delivery of data from a client to a server, from a client to database or other storage location, or from one client to another client (see col. 6, lines 27-30).

Regarding claim 23, Ginzburg discloses delivering the requested data at the desired bit rate (see col. 3, lines 54-59).

Regarding claims 25 and 26, Ginzburg discloses that the network client 14 and server 17 exchange information over network 16. Further regarding claim 25, Ginzburg discloses network 16 can accommodate the requested data transfer bit rate (see col. 3, lines 43-50).

Regarding claim 27, Ginzburg discloses a method of managing data flow over transport medium in an interactive transmission type, comprising: identifying at least one transmission characteristic (identify network parameter such as transfer bit rate) of a transmitter used to transmit data over the transport medium; and modifying data flow management based on the identified at least one transmission characteristic (network 16 can accommodate the requested

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data transfer bit rate) (see col. 5, lines 10-17; col. 3, lines 43-50). Ginzburg does not specifically disclose accessing stored configuration information, and based on the accessed configuration information, identifying at least one transmission characteristic of a transmitter. However, Ueno discloses that storing data having a traffic characteristic at the server 11, and a network 14 executes the bandwidth resource allocation based on the characteristic of the transmission rate change designated by the notified parameter to control the transmission included adjusting the traffic management and the running of the network (see col. 11, lines 7-20). Therefore, it would have been obvious to one of ordinary skill in the art to modify Ginzburg by accessing the stored configuration information to determine the predefined transmission characteristic and identifying transmission characteristic of the transmitter based on the configuration information in order to efficiently perform a traffic management and a network management.

Regarding claim 28, Ginzburg discloses performing a network parameter determination prior to delivery of data from a client to a server, from a client to database or other storage location, or from one client to another client (see col. 6, lines 27-30).

Regarding claim 29, Ginzburg discloses delivering the requested data at the desired bit rate (see col. 3, lines 54-59).

Regarding claim 30, Ginzburg discloses that the network client 14 and server 17 exchange information over network 16 (see col. 3, lines 43-50).

Claims 33, 35 and 37 recite similar limitations of claim 31. Therefore, they are rejected for the same reasons.

Claims 34, 36 and 38 recite similar limitations of claim 32. Therefore, they are rejected for the same reasons.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mitsutake et al (US 6240460) teaches a method and system for data transmission accordance with the form of the data transmission based on control information exchanged between applications of a data transmitter and a data receiver before data transmission is started.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 703-306-5976. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

NV
August 26, 2002


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600